


**From:** Casburn, Tracey  
**Location:** R7-RO2.3-L08-12/R7-RO; R7-Conflin-P10XXXX/Phone/R7-RO  
**Importance:** Normal  
**Subject:** Talk about path forward for SO2 DRR modeling submitted based on 2015 CEMS data  
**Start Date/Time:** Tue 1/10/2017 8:30:00 PM  
**End Date/Time:** Tue 1/10/2017 9:30:00 PM

**To:** Wharton, Tracy[tracy.wharton@nebraska.gov]  
**Cc:** Crable, Gregory[Crable.Gregory@epa.gov]; Avey, Lance[Avey.Lance@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Peter, David  
**Sent:** Thur 1/12/2017 3:31:51 PM  
**Subject:** FW: Question about SO2 Modeling results due to tomorrow for Whelan

Tracy,

It is OK to send the hard copy package by regular mail, postmarked by tomorrow. Please email the documents that can be easily scanned (i.e., cover letter, modeling summary report, any updated designation recommendations, etc.) to Administrator Hague by the COB tomorrow and copy me, Greg and Lance on the email. The modeling files can just be included in the package that is mailed.

David Peter

Environmental Engineer

U.S. EPA Region 7, Air Permitting Branch

11201 Renner Boulevard

Lenexa, KS 66219

913-551-7397

**From:** Crable, Gregory  
**Sent:** Thursday, January 12, 2017 9:20 AM  
**To:** Algae-Eakin, Amy <Algae-Eakin.Amy@epa.gov>; Avey, Lance <Avey.Lance@epa.gov>; Peter, David <peter.david@epa.gov>  
**Subject:** FW: Question about SO2 Modeling results due to tomorrow for Whelan  
**Importance:** High

**From:** Wharton, Tracy [<mailto:tracy.wharton@nebraska.gov>]  
**Sent:** Thursday, January 12, 2017 9:17 AM

**To:** Crable, Gregory <[Crable.Gregory@epa.gov](mailto:Crable.Gregory@epa.gov)>

**Subject:** Question about SO2 Modeling results due to tomorrow for Whelan

**Importance:** High

Greg,

Hi, I hope your week is going well! A quick question RE: the SO2 modeling results that are due tomorrow for Whelan Energy Center – are those to be received by EPA NLT tomorrow OR is it acceptable that they are postmarked by tomorrow with an email sent to Administrator Hague? The modeling report can be sent via email, but the modeling data is about 182 Mb and I think we can do a drop-box for that, but will verify.

I still have time to overnight this...

Thank you and have a great day!

Tracy

Respectfully,

**Tracy Wharton**

NAAQS-SIP COORDINATOR

Air Quality Division

**Nebraska Department of Environmental Quality**

1200 N Street, Suite 400

PO Box 98922

Lincoln, NE 68509-8922

PHONE: (402) 471-6410

<http://deq.ne.gov>



**From:** Casburn, Tracey  
**Location:** R7-RO2.3-L08-12/R7-RO; R7-Conflin-[Ex. 6 - Personal Privacy]P10XXXX/Phone/R7-RO  
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**End Date/Time:** Tue 1/10/2017 9:30:00 PM

**To:** Casburn, Tracey[casburn.tracey@epa.gov]  
**Cc:** Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Bybee, Darcy[darcy.bybee@dnr.mo.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]; Keas, Ashley[Ashley.Keas@dnr.mo.gov]  
**From:** Bechtel, Cheri  
**Sent:** Thur 12/8/2016 5:28:33 PM  
**Subject:** FW: Missouri SO2 Area Recommendations for December 2017 Designations  
[2010-SO2-5 DRR Modeling submittal w-o appendices.pdf](#)

Ms. Casburn,

As the attachment to the previous email was too large, I am sending this revised attachment. Please contact Ashley Keas ([Ashley.keas@dnr.mo.gov](mailto:Ashley.keas@dnr.mo.gov) or (573) 526-5601) to arrange FTP transferal of the appendices.

Thanks very much,

Cheri Bechtel

Air Pollution Control Program

573-751-8308

[cheri.bechtels@dnr.mo.gov](mailto:cheri.bechtels@dnr.mo.gov)

*Promoting, Protecting and Enjoying our Natural Resources. Learn more at [dnr.mo.gov](http://dnr.mo.gov).*

**From:** Bechtel, Cheri  
**Sent:** Thursday, December 08, 2016 10:38 AM  
**To:** Casburn, Tracey  
**Cc:** 'algae-eakin.amy@epa.gov'; Bybee, Darcy; Wilbur, Emily; Keas, Ashley  
**Subject:** Missouri SO2 Area Recommendations for December 2017 Designations

Ms. Casburn,

The subject submittal is attached. Please let me know if anything else is needed.

Thank you,

**Cheri Bechtel**

Air Pollution Control Program

573-751-8308

[cheri.bechtel@dnr.mo.gov](mailto:cheri.bechtel@dnr.mo.gov)

*Promoting, Protecting and Enjoying our Natural Resources. Learn more at [dnr.mo.gov](http://dnr.mo.gov).*

**To:** Grooms, Leland[Grooms.Leland@epa.gov]; Crable, Gregory[Crable.Gregory@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; russell.hadan@douglascounty-ne.gov[russell.hadan@douglascounty-ne.gov]; Jim S. Fobben (jfobben@lincoln.ne.gov)[jfobben@lincoln.ne.gov]; Chris M. Schroeder (cschroeder@lincoln.ne.gov)[cschroeder@lincoln.ne.gov]  
**Cc:** Ellis, Todd[todd.ellis@nebraska.gov]; Wiese, Carrie[carrie.wiese@nebraska.gov]; chris.hetzler@nebraska.gov[chris.hetzler@nebraska.gov]; Morton, Kyle[kyle.morton@nebraska.gov]  
**From:** Yeggy, Jim  
**Sent:** Tue 12/6/2016 4:50:32 PM  
**Subject:** Addendum to the Nebraska 2016 Ambient Air Monitoring Network Plan  
[AddCvr120616.pdf](#)  
[NR Add 120616F.pdf](#)

FYI/FAA

See attached Addendum to the Nebraska 2016 Ambient Air Monitoring Network Plan and the submittal cover letter.

The Addendum proposes a new SO2 site in Omaha to meet Part 51 Subpart BB requirements, as explained in the attached documents.

Questions concerning the Addendum are best addressed to Carrie Wiese at 402/471-6624 or [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov).

Have a great Christmas and New Years!

Jim Yeggy

Program Specialist

NDEQ Air Quality Compliance Section

402/471-2142 office

402/202-0272 cell

**To:** Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**Cc:** Ellis, Todd[todd.ellis@nebraska.gov]; jim.yeggy@nebraska.gov[jim.yeggy@nebraska.gov];  
McManus, Brian[brian.mcmanus@nebraska.gov]  
**From:** Wiese, Carrie  
**Sent:** Thur 11/17/2016 8:48:31 PM  
**Subject:** FW: Addendum to the 2016 network plan to be made available for public inspection  
[NR Add111716pid CW.docx](#)  
[NR Add111716pid CW.pdf](#)

Hi Amy,

Attached, please find our addendum prepared for public notice – just wanted to verify that the 7-day period we discussed on the phone the other day would be acceptable in lieu of 30 days.

Thanks,  
Carrie

**From:** Yeggy, Jim  
**Sent:** Thursday, November 17, 2016 2:22 PM  
**To:** McManus, Brian  
**Cc:** Wiese, Carrie; Ellis, Todd  
**Subject:** Addendum to the 2016 network plan to be made available for public inspection

Brian,

I attached both docx and pdf versions of the addendum. It is very important that this be put on the NDEQ web site for a 30 day public review period as soon as possible.

Thanks.

Jim Yeggy

402/202-0272

**To:** Avey, Lance[Avey.Lance@epa.gov]; Peter, David[peter.david@epa.gov]  
**Cc:** Stoner, Kevin J[kevin.j.stoner@nebraska.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Wiese, Carrie  
**Sent:** Wed 10/26/2016 9:05:47 PM  
**Subject:** RE: North Omaha Station - Possible SO2 Monitoring Site Evaluation

Good afternoon, all:

I had a phone call from OPPD this morning, requesting any information on approval of the new SO2 monitoring site (site 1 vs. site 2). Is there any update here? Also, is there any additional information about public notice of our network monitoring plan (whether it would be required to be done again)?

Thanks,  
Carrie

**From:** Avey, Lance [mailto:Avey.Lance@epa.gov]  
**Sent:** Friday, October 21, 2016 9:30 AM  
**To:** Wiese, Carrie; Peter, David  
**Cc:** Stoner, Kevin J; Algae-Eakin, Amy  
**Subject:** RE: North Omaha Station - Possible SO2 Monitoring Site Evaluation

Hi Carrie,

Thanks for getting the new proposed sites and this information together so quickly. From the technical side, my preference is Site 2 as the modeling predicts that is where we see the greatest potential impacts from OPPD emissions. For Site 1, that was considered on OPPD property, and thus no modeling "receptors" were placed near Site 1 and thus no evaluation of Site 1 in terms of modeled impacts can be done. I attached the modeling results nearby OPPD with the locations of proposed Sites 1 & 2 and current Whitmore. Basically, the red dots represent where the modeling predicts the greatest impacts from OPPD emissions. And as you can see that is around Site 2.

At the same time, I understand the interference concerns that you have for Site 2. We will see if the monitoring group shares your interference concerns and pass along their thoughts on the two proposed sites. Hopefully a quick turnaround response can be provided early next week.

Thanks again,

Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7809

[avey.lance@epa.gov](mailto:avey.lance@epa.gov)

**From:** Wiese, Carrie [mailto:carrie.wiese@nebraska.gov]

**Sent:** Thursday, October 20, 2016 3:17 PM

**To:** Avey, Lance <Avey.Lance@epa.gov>; Peter, David <peter.david@epa.gov>

**Cc:** Stoner, Kevin J <kevin.j.stoner@nebraska.gov>

**Subject:** North Omaha Station - Possible SO2 Monitoring Site Evaluation

**Importance:** High

Good afternoon, Lance and David:

Earlier this week, we spoke with OPPD and Douglas County Health Department regarding the concerns with moving the Whitmore monitor. What was decided as a group was that, rather than running risks with the ozone data for Whitmore and also the potential for having no SO2 data for the new site as of January 1 if there should be any issues getting the monitor up and running, a new SO2 monitor would be established and Whitmore would be left in place. This morning, I visited the area with representatives of OPPD and DCHD to evaluate possible sites to install the monitor, and two locations appeared feasible. Locations and site photos are included in the attachment.



Site 1 may be preferable because it is within a secure fenced area through which entry through a guard shack is required and is already level and paved, thus minimizing the site prep required and offering the most secure location for the monitoring trailer. It is also preferable over Site 2 because dust and possible interference from road and rail traffic will be minimized. However, this is within the fenceline of North Omaha station, which raises concerns about whether it can be considered a valid monitor location for ambient air.

For the latter reason, Site 2 may be preferable. However, again, the parking area is dirt/gravel and dust from this area will require additional maintenance of the monitor stack. It is also within a public access area which, although it would be fenced, may present issues with vandalism. Also as noted above and visible in the attachment, it is along Pershing Blvd. and very near rail line, which may present some interference concerns.

Please let us know, as soon as possible, whether EPA has a preference for one site over the other, or either would be acceptable. DCHD has begun the process of ordering the necessary equipment, but OPPD will require as much lead time as possible to address any site prep issues required, including running electricity, to have the trailer in place and monitoring begun by January 1.

Thanks, and please let me know if you have any questions,

Carrie

**Carrie Wiese**

Carrie Wiese

Supervisor – Air Quality Grants, Planning and Outreach Unit

Nebraska Department of Environmental Quality

1200 N Street, Suite 400

Lincoln, NE 68508

(402)471-6624, [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)

**To:** Wiese, Carrie[carrie.wiese@nebraska.gov]; Peter, David[peter.david@epa.gov]  
**Cc:** Stoner, Kevin J[kevin.j.stoner@nebraska.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Avey, Lance  
**Sent:** Fri 10/21/2016 2:29:49 PM  
**Subject:** RE: North Omaha Station - Possible SO2 Monitoring Site Evaluation  
[OPPD\\_siting.png](#)

Hi Carrie,

Thanks for getting the new proposed sites and this information together so quickly. From the technical side, my preference is Site 2 as the modeling predicts that is where we see the greatest potential impacts from OPPD emissions. For Site 1, that was considered on OPPD property, and thus no modeling "receptors" were placed near Site 1 and thus no evaluation of Site 1 in terms of modeled impacts can be done. I attached the modeling results nearby OPPD with the locations of proposed Sites 1 & 2 and current Whitmore. Basically, the red dots represent where the modeling predicts the greatest impacts from OPPD emissions. And as you can see that is around Site 2.

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Thanks again,

Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7809

avey.lance@epa.gov

**From:** Wiese, Carrie [mailto:carrie.wiese@nebraska.gov]  
**Sent:** Thursday, October 20, 2016 3:17 PM  
**To:** Avey, Lance <Avey.Lance@epa.gov>; Peter, David <peter.david@epa.gov>  
**Cc:** Stoner, Kevin J <kevin.j.stoner@nebraska.gov>  
**Subject:** North Omaha Station - Possible SO2 Monitoring Site Evaluation  
**Importance:** High

Good afternoon, Lance and David:

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Please let us know, as soon as possible, whether EPA has a preference for one site over the other,

or either would be acceptable. DCHD has begun the process of ordering the necessary equipment, but OPPD will require as much lead time as possible to address any site prep issues required, including running electricity, to have the trailer in place and monitoring begun by January 1.

Thanks, and please let me know if you have any questions,

Carrie

**Carrie Wiese**

Carrie Wiese

Supervisor – Air Quality Grants, Planning and Outreach Unit

Nebraska Department of Environmental Quality

1200 N Street, Suite 400

Lincoln, NE 68508

(402)471-6624, [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)

**To:** Avey, Lance[Avey.Lance@epa.gov]  
**Cc:** Wharton, Tracy[tracy.wharton@nebraska.gov]; Peter, David[peter.david@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Wiese, Carrie  
**Sent:** Tue 10/11/2016 8:05:44 PM  
**Subject:** RE: North Omaha SO2 monitoring - moving Whitmore

Good afternoon, all:

I'm following up on my message from a couple of weeks ago – specifically “One issue that DCHD mentioned is that the set-up at Whitmore also includes an ozone analyzer that shares equipment (software, data logger, etc.) with the SO2 analyzer. Essentially, the only way to have the system up and running by January 1 would be to move everything, including the ozone equipment. However, this would cause that particular location to fall short of the three years of ozone data (it's now been in place for 2 seasons). Would this present an issue with ozone attainment data?”

Has anyone been able to address this?

Thanks!

Carrie

**From:** Wiese, Carrie  
**Sent:** Friday, September 30, 2016 10:53 AM  
**To:** Avey, Lance  
**Cc:** Wharton, Tracy; Peter, David; Algae-Eakin, Amy  
**Subject:** RE: North Omaha SO2 monitoring - moving Whitmore

Thanks very much for all of your help, Lance!

**From:** Avey, Lance [mailto:Avey.Lance@epa.gov]  
**Sent:** Friday, September 30, 2016 10:38 AM  
**To:** Wiese, Carrie  
**Cc:** Wharton, Tracy; Peter, David; Algae-Eakin, Amy  
**Subject:** RE: North Omaha SO2 monitoring - moving Whitmore

Hi Carrie,

Thanks for the information. On your last paragraph, yes, I have the modeling ranking analysis to justify the new location. When you know the exact location of the re-located Whitmore monitor (latitude, longitude), make a similar table to Table E-1 of the updated Sheldon Station Attachment and include that in the updated attachment for North Omaha.

I am checking with some of our monitoring folks (who are out of the office today) if the updated network plan would need to be placed on public notice and if re-locating Whitmore would cause any ozone consequences.

Thanks

Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

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(913) 551-7809

[avey.lance@epa.gov](mailto:avey.lance@epa.gov)

**From:** Wiese, Carrie [mailto:carrie.wiese@nebraska.gov]  
**Sent:** Friday, September 30, 2016 9:02 AM

**To:** Peter, David <peter.david@epa.gov>; Avey, Lance <Avey.Lance@epa.gov>; Algae-Eakin, Amy <Algae-Eakin.Amy@epa.gov>  
**Cc:** Wharton, Tracy <tracy.wharton@nebraska.gov>  
**Subject:** North Omaha SO2 monitoring - moving Whitmore

Good morning, all:

I wanted to update you on the discussions we've had internally and with OPPD and Douglas County Health Department (the local air agency that does the monitoring in that area), regarding the North Omaha SO2 monitor.

At this time, it sounds like the preference for all involved would be to move the Whitmore monitor to the area of the ball fields just south of North Omaha Station, indicated as the area of highest impact from the modeling we conducted. One issue that DCHD mentioned is that the set-up at Whitmore also includes an ozone analyzer that shares equipment (software, data logger, etc.) with the SO2 analyzer. Essentially, the only way to have the system up and running by January 1 would be to move everything, including the ozone equipment. However, this would cause that particular location to fall short of the three years of ozone data (it's now been in place for 2 seasons). Would this present an issue with ozone attainment data?

Lance, I also wanted to check in with you regarding the ranking analysis, etc., to justify placement. In a modeling update from Lisa, she indicated that she had sent the completed site evaluation to you. Have we, then, completed everything with the ranking analysis that's needed to update the attachment? Also, how should we proceed with the network plan? If we're moving the Whitmore monitor, I would think this would constitute a sufficiently major change to what was proposed July 1 that we'd need to public notice again?

Thanks,

Carrie

**Carrie Wiese**

Carrie Wiese



Supervisor – Air Quality Grants, Planning and Outreach Unit

Nebraska Department of Environmental Quality

1200 N Street, Suite 400

Lincoln, NE 68508

(402)471-6624, [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)

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**Cc:** Wharton, Tracy[tracy.wharton@nebraska.gov]; Peter, David[peter.david@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Wiese, Carrie  
**Sent:** Fri 9/30/2016 3:53:01 PM  
**Subject:** RE: North Omaha SO2 monitoring - moving Whitmore

Thanks very much for all of your help, Lance!

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**Sent:** Friday, September 30, 2016 10:38 AM  
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**Cc:** Wharton, Tracy; Peter, David; Algae-Eakin, Amy  
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Lance

Lance Avey

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**Sent:** Friday, September 30, 2016 9:02 AM

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**Cc:** Wharton, Tracy <tracy.wharton@nebraska.gov>

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Supervisor – Air Quality Grants, Planning and Outreach Unit

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**From:** Avey, Lance  
**Sent:** Fri 9/30/2016 3:37:54 PM  
**Subject:** RE: North Omaha SO2 monitoring - moving Whitmore

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**Cc:** Wharton, Tracy[tracy.wharton@nebraska.gov]  
**From:** Wiese, Carrie  
**Sent:** Fri 9/30/2016 2:01:54 PM  
**Subject:** North Omaha SO2 monitoring - moving Whitmore

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Lance, I also wanted to check in with you regarding the ranking analysis, etc., to justify placement. In a modeling update from Lisa, she indicated that she had sent the completed site evaluation to you. Have we, then, completed everything with the ranking analysis that's needed to update the attachment? Also, how should we proceed with the network plan? If we're moving the Whitmore monitor, I would think this would constitute a sufficiently major change to what was proposed July 1 that we'd need to public notice again?

Thanks,

Carrie

**Carrie Wiese**

Carrie Wiese



Supervisor – Air Quality Grants, Planning and Outreach Unit

Nebraska Department of Environmental Quality

1200 N Street, Suite 400

Lincoln, NE 68508

(402)471-6624, [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)

**To:** Avey, Lance[Avey.Lance@epa.gov]; 'Wiese, Carrie'[carrie.wiese@nebraska.gov]; Wharton, Tracy[tracy.wharton@nebraska.gov]; Hamilton, Heather[Hamilton.Heather@epa.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Peter, David[peter.david@epa.gov]; McGraw, Jim [DNR][jim.mcgraw@dnr.iowa.gov]; brad.ashton@dnr.iowa.gov[brad.ashton@dnr.iowa.gov]; Krzak, Jennifer [DNR][Jennifer.Krzak@dnr.iowa.gov]  
**Cc:** Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Johnson, Matthew [DNR]  
**Sent:** Wed 8/31/2016 8:51:39 PM  
**Subject:** RE: call to discuss Omaha/Council Bluffs SO2 DRR work - 9/8/16, 9 am  
[removed.txt](#)

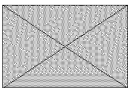
Time confirmed, thank you everyone.

Thursday September 8, 2016, 9:00 am (CDT)

We'll use the Iowa DNR Conf Call Line:

**Ex. 6 - Personal Privacy**

**MATTHEW JOHNSON**, Long Range Planning & Regional Modeling



**Iowa Department of Natural Resources**

P 515.725.9554 | F 515.725.9501 | [matthew.johnson@dnr.iowa.gov](mailto:matthew.johnson@dnr.iowa.gov)

Air Quality Bureau | 7900 Hickman Rd., Ste. 1 | Windsor Heights, IA 50324

[www.IowaCleanAir.gov](http://www.IowaCleanAir.gov) | Air Construction Permit Hotline 877.247.4692

**[WWW.IOWADNR.GOV](http://WWW.IOWADNR.GOV)**



*Leading Iowans in Caring for Our Natural Resources.*

**From:** Johnson, Matthew [DNR] [<mailto:Matthew.Johnson@dnr.iowa.gov>]

**Sent:** Wednesday, August 31, 2016 2:40 PM

**To:** Hamilton, Heather <[Hamilton.Heather@epa.gov](mailto:Hamilton.Heather@epa.gov)>

**Cc:** Avey, Lance <[Avey.Lance@epa.gov](mailto:Avey.Lance@epa.gov)>; Hawkins, Andy <[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)>; Peter, David <[peter.david@epa.gov](mailto:peter.david@epa.gov)>; McGraw, Jim [DNR] <[jim.mcgraw@dnr.iowa.gov](mailto:jim.mcgraw@dnr.iowa.gov)>; [brad.ashton@dnr.iowa.gov](mailto:brad.ashton@dnr.iowa.gov); Krzak, Jennifer [DNR] <[Jennifer.Krzak@dnr.iowa.gov](mailto:Jennifer.Krzak@dnr.iowa.gov)>; Carrie Wiese ([carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)) <[carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)>; Tracy Wharton ([tracy.wharton@nebraska.gov](mailto:tracy.wharton@nebraska.gov)) <[tracy.wharton@nebraska.gov](mailto:tracy.wharton@nebraska.gov)>

**Subject:** call to discuss Omaha/Council bluffs SO2 DRR work

Hello Heather (and all),

We've spoken with Nebraska and provided an update regarding the 1-hour SO2 modeling analyses we've conducted for Walter Scott and OPPD for the data requirement rule. We'd like to have a NE/IA/EPA R7 call to discuss the results. Assuming our planning call next week won't take the full 1.5 hours, would EPA R7 be available for this call at 10 am Wed September 7?

Thanks,

Matthew

**To:** 'Wiese, Carrie'[carrie.wiese@nebraska.gov]; Avey, Lance[Avey.Lance@epa.gov]; Hamilton, Heather[Hamilton.Heather@epa.gov]  
**Cc:** Hawkins, Andy[hawkins.andy@epa.gov]; Peter, David[peter.david@epa.gov]; McGraw, Jim [DNR][jim.mcgraw@dnr.iowa.gov]; brad.ashton@dnr.iowa.gov[brad.ashton@dnr.iowa.gov]; Krzak, Jennifer [DNR][Jennifer.Krzak@dnr.iowa.gov]; Wharton, Tracy[tracy.wharton@nebraska.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Johnson, Matthew [DNR]  
**Sent:** Wed 8/31/2016 8:14:54 PM  
**Subject:** RE: call to discuss Omaha/Council bluffs SO2 DRR work

Does Thursday Sep 8, at 9 am work for everyone?

**From:** Wiese, Carrie [mailto:carrie.wiese@nebraska.gov]  
**Sent:** Wednesday, August 31, 2016 3:14 PM  
**To:** Avey, Lance <Avey.Lance@epa.gov>; Johnson, Matthew [DNR] <Matthew.Johnson@dnr.iowa.gov>; Hamilton, Heather <Hamilton.Heather@epa.gov>  
**Cc:** Hawkins, Andy <hawkins.andy@epa.gov>; Peter, David <peter.david@epa.gov>; McGraw, Jim [DNR] <jim.mcgraw@dnr.iowa.gov>; Ashton, Brad [DNR] <Brad.Ashton@dnr.iowa.gov>; Krzak, Jennifer [DNR] <Jennifer.Krzak@dnr.iowa.gov>; Wharton, Tracy <tracy.wharton@nebraska.gov>; Algae-Eakin, Amy <Algae-Eakin.Amy@epa.gov>  
**Subject:** RE: call to discuss Omaha/Council bluffs SO2 DRR work

It looks like Thursday could also work for us before 11:00 a.m.

**From:** Avey, Lance [mailto:Avey.Lance@epa.gov]  
**Sent:** Wednesday, August 31, 2016 3:10 PM  
**To:** Johnson, Matthew [DNR]; Hamilton, Heather  
**Cc:** Hawkins, Andy; Peter, David; McGraw, Jim [DNR]; brad.ashton@dnr.iowa.gov; Krzak, Jennifer [DNR]; Wiese, Carrie; Wharton, Tracy; Algae-Eakin, Amy  
**Subject:** RE: call to discuss Omaha/Council bluffs SO2 DRR work

Hi Matthew,

The one day next week that does not work for me (or Andy) would be Sept. 7. Would Tuesday (6<sup>th</sup>) or Thursday (8<sup>th</sup>) work?

Thanks

Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7809

[avey.lance@epa.gov](mailto:avey.lance@epa.gov)

**From:** Johnson, Matthew [DNR] [<mailto:Matthew.Johnson@dnr.iowa.gov>]

**Sent:** Wednesday, August 31, 2016 2:40 PM

**To:** Hamilton, Heather <[Hamilton.Heather@epa.gov](mailto:Hamilton.Heather@epa.gov)>

**Cc:** Avey, Lance <[Avey.Lance@epa.gov](mailto:Avey.Lance@epa.gov)>; Hawkins, Andy <[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)>; Peter, David <[peter.david@epa.gov](mailto:peter.david@epa.gov)>; McGraw, Jim [DNR] <[jim.mcgraw@dnr.iowa.gov](mailto:jim.mcgraw@dnr.iowa.gov)>; [brad.ashton@dnr.iowa.gov](mailto:brad.ashton@dnr.iowa.gov); Krzak, Jennifer [DNR] <[Jennifer.Krzak@dnr.iowa.gov](mailto:Jennifer.Krzak@dnr.iowa.gov)>; Carrie Wiese ([carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)) <[carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)>; Tracy Wharton ([tracy.wharton@nebraska.gov](mailto:tracy.wharton@nebraska.gov)) <[tracy.wharton@nebraska.gov](mailto:tracy.wharton@nebraska.gov)>

**Subject:** call to discuss Omaha/Council bluffs SO2 DRR work

Hello Heather (and all),

We've spoken with Nebraska and provided an update regarding the 1-hour SO2 modeling analyses we've conducted for Walter Scott and OPPD for the data requirement rule. We'd like to have a NE/IA/EPA R7 call to discuss the results. Assuming our planning call next week won't take the full 1.5 hours, would EPA R7 be available for this call at 10 am Wed September 7?

Thanks,

Matthew

**To:** Avey, Lance[Avey.Lance@epa.gov]; Hamilton, Heather[Hamilton.Heather@epa.gov]; Tracy Wharton (tracy.wharton@nebraska.gov)[tracy.wharton@nebraska.gov]; Carrie Wiese (carrie.wiese@nebraska.gov)[carrie.wiese@nebraska.gov]; Hawkins, Andy[hawkins.andy@epa.gov]  
**Cc:** Peter, David[peter.david@epa.gov]; McGraw, Jim [DNR][jim.mcgraw@dnr.iowa.gov]; brad.ashton@dnr.iowa.gov[brad.ashton@dnr.iowa.gov]; Krzak, Jennifer [DNR][Jennifer.Krzak@dnr.iowa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Johnson, Matthew [DNR]  
**Sent:** Wed 8/31/2016 8:12:21 PM  
**Subject:** RE: call to discuss Omaha/Council bluffs SO2 DRR work

Thursday would work for Iowa.

Nebraska – will it work for you?

**From:** Avey, Lance [mailto:Avey.Lance@epa.gov]  
**Sent:** Wednesday, August 31, 2016 3:10 PM  
**To:** Johnson, Matthew [DNR] <Matthew.Johnson@dnr.iowa.gov>; Hamilton, Heather <Hamilton.Heather@epa.gov>  
**Cc:** Hawkins, Andy <hawkins.andy@epa.gov>; Peter, David <peter.david@epa.gov>; McGraw, Jim [DNR] <jim.mcgraw@dnr.iowa.gov>; Ashton, Brad [DNR] <Brad.Ashton@dnr.iowa.gov>; Krzak, Jennifer [DNR] <Jennifer.Krzak@dnr.iowa.gov>; Carrie Wiese (carrie.wiese@nebraska.gov) <carrie.wiese@nebraska.gov>; Tracy Wharton (tracy.wharton@nebraska.gov) <tracy.wharton@nebraska.gov>; Algae-Eakin, Amy <Algae-Eakin.Amy@epa.gov>  
**Subject:** RE: call to discuss Omaha/Council bluffs SO2 DRR work

Hi Matthew,

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Thanks

Lance

Lance Avey  
EPA Region 7  
11201 Renner Boulevard  
Lenexa, Kansas 66219  
(913) 551-7809  
[avey.lance@epa.gov](mailto:avey.lance@epa.gov)

**From:** Johnson, Matthew [DNR] [<mailto:Matthew.Johnson@dnr.iowa.gov>]  
**Sent:** Wednesday, August 31, 2016 2:40 PM  
**To:** Hamilton, Heather <[Hamilton.Heather@epa.gov](mailto:Hamilton.Heather@epa.gov)>  
**Cc:** Avey, Lance <[Avey.Lance@epa.gov](mailto:Avey.Lance@epa.gov)>; Hawkins, Andy <[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)>; Peter, David <[peter.david@epa.gov](mailto:peter.david@epa.gov)>; McGraw, Jim [DNR] <[jim.mcgraw@dnr.iowa.gov](mailto:jim.mcgraw@dnr.iowa.gov)>; [brad.ashton@dnr.iowa.gov](mailto:brad.ashton@dnr.iowa.gov); Krzak, Jennifer [DNR] <[Jennifer.Krzak@dnr.iowa.gov](mailto:Jennifer.Krzak@dnr.iowa.gov)>; Carrie Wiese ([carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)) <[carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)>; Tracy Wharton ([tracy.wharton@nebraska.gov](mailto:tracy.wharton@nebraska.gov)) <[tracy.wharton@nebraska.gov](mailto:tracy.wharton@nebraska.gov)>  
**Subject:** call to discuss Omaha/Council bluffs SO2 DRR work

Hello Heather (and all),

We've spoken with Nebraska and provided an update regarding the 1-hour SO2 modeling analyses we've conducted for Walter Scott and OPPD for the data requirement rule. We'd like to have a NE/IA/EPA R7 call to discuss the results. Assuming our planning call next week won't take the full 1.5 hours, would EPA R7 be available for this call at 10 am Wed September 7?

Thanks,  
  
Matthew





**To:** Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
**Cc:** Peter, David[peter.david@epa.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Brown, Steven[Brown.Steven@epa.gov]; Avey, Lance[Avey.Lance@epa.gov]  
**From:** Bybee, Darcy  
**Sent:** Wed 7/13/2016 8:26:45 PM  
**Subject:** RE: FYI- Region 7 Comments on MDNR DRR modeling protocol

Thank you Amy and Andy—we will review the comments and let Andy know of any questions.

Thanks,

Darcy

Darcy A. Bybee

Air Pollution Control Program

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**From:** Algae-Eakin, Amy [mailto:Algae-Eakin.Amy@epa.gov]  
**Sent:** Wednesday, July 13, 2016 3:09 PM  
**To:** Bybee, Darcy; Wilbur, Emily  
**Cc:** Peter, David; Hawkins, Andy; Brown, Steven; Avey, Lance  
**Subject:** FYI- Region 7 Comments on MDNR DRR modeling protocol

Emily and Darcy,

Thank you for providing the protocol for DRR modeling. Overall, Andy has reviewed and believes the document looks good.

We consider the comments below informal, as we believe the DRR modeling protocol is a living document. It is our desire to be reasonable and work with you to address issues which may invariably arise and the

modeling protocol may need to be adjusted.

For specifics related to the comments below, please feel free to directly discuss with Andy.

1. Section 3.3 if the department is aware of fixed release parameters different than in MoEIS they should be evaluated for use. For example, RATA data contains stack parameters at varying loads. There may be other stack testing data the department has that can be used. MDNR should attempt to avoid using stack parameters not reflecting normal actual operations that may lead to under predicted modeling concentrations. Modeling with stack parameters under varying load scenarios may be appropriate if stack temp and exit velocity parameters are fixed while emissions vary. This is especially true if the modeled design value is close to the NAAQS or if there is wide range of stack exit conditions that can't be represented by a fixed parameter.

2. Section 3.4 A hot spot analysis may be necessary if high modeled results occur in areas with large receptor spacing distance. This might occur for those sources with tall stacks whose maximum impacts may extend downwind and in areas of terrain or next to other smaller sources of SO<sub>2</sub> emissions where there is an interaction.

3. Section 3.6 please consider specifying if monthly or seasonal assignments will be used in AERSURFACE.

4. Section 4.1 – please work with EPA should the background methodology vary substantially over past MDNR analysis. We agree that each area should be evaluated independently and discussed in the final report.

5. Pg 18 contains this statement...All monitors being sited to comply with the DRR must be operational no later than January 1, 2017. Should any new monitors not be operational by that date, the source will move to the modeling pathway to characterize air quality and the analysis will follow this protocol for modeled sources. – There is uncertainty about this statement and we might want to talk about this further to understand context.

**Amy Algoe-Eakin, Section Chief**

U.S. EPA Region 7

Air & Waste Management Division

Air Planning and Development Branch

(913) 551-7942 (Office)

(913) 424-8853 (Cell)

11201 Renner Boulevard, Lenexa KS 66219  
[algoe-eakin.amy@epa.gov](mailto:algoe-eakin.amy@epa.gov)



**To:** Wiese, Carrie[carrie.wiese@nebraska.gov]  
**Cc:** Schneider, Shelley[shelley.schneider@nebraska.gov]; Crable, Gregory[Crable.Gregory@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Avey, Lance  
**Sent:** Wed 7/13/2016 1:05:12 PM  
**Subject:** RE: Monitoring/modeling TAD

Hi Carrie,

Also asked on the call yesterday was what other Region 7 states were doing in terms of monitoring for the SO2 DRR. Iowa and Kansas are not monitoring for any DRR sources. Here is a link to Missouri's 2016 air monitoring plan, with the Appendices 2-4 describing the modeling process used by MDNR to site SO2 monitors:

<https://dnr.mo.gov/env/apcp/docs/2016monitoringnetworkplan.pdf>

Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7809

avey.lance@epa.gov

**From:** Wiese, Carrie [mailto:carrie.wiese@nebraska.gov]  
**Sent:** Tuesday, July 12, 2016 3:29 PM  
**To:** Avey, Lance <Avey.Lance@epa.gov>  
**Cc:** Schneider, Shelley <shelley.schneider@nebraska.gov>  
**Subject:** Monitoring/modeling TAD

Hi Lance,

I was wondering if you could send a final copy of the monitoring TAD/appendix referencing modeling that you discussed in our call this afternoon? We have had a hard time finding anything online, and the document we did locate is labeled “draft”.

Thanks!  
Carrie

**Carrie Wiese**

Carrie Wiese

Supervisor – Air Quality Grants, Planning and Outreach Unit

Nebraska Department of Environmental Quality

1200 N Street, Suite 400

Lincoln, NE 68508

(402)471-6624, [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)

**To:** Wiese, Carrie[carrie.wiese@nebraska.gov]  
**Cc:** Schneider, Shelley[shelley.schneider@nebraska.gov]; Algoe-Eakin, Amy[Algoe-Eakin.Amy@epa.gov]; Crable, Gregory[Crable.Gregory@epa.gov]  
**From:** Avey, Lance  
**Sent:** Tue 7/12/2016 8:44:12 PM  
**Subject:** RE: Monitoring/modeling TAD

Hi Carrie,

Here is a link to latest Draft SO2 Monitoring TAD (it is always subject to change and thus not final):

<https://www.epa.gov/sites/production/files/2016-04/documents/so2monitoringtad.pdf>

Appendix A provides the recommended example of a modeling demonstration to inform monitoring placement for 1-hr SO2. You can see the “ranking” analysis I described on the call within this Appendix.

Also, here is a link to the State of Georgia’s air monitoring plan where they performed this ranking analysis to site a monitor for a DRR source (see pages 111-139):

<http://amp.georgiaair.org/docs/2016%20Ambient%20Air%20Monitoring%20Plan.pdf>

Please let me know of any further questions.

Thanks  
Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7809

avey.lance@epa.gov

**From:** Wiese, Carrie [mailto:carrie.wiese@nebraska.gov]  
**Sent:** Tuesday, July 12, 2016 3:29 PM  
**To:** Avey, Lance <Avey.Lance@epa.gov>  
**Cc:** Schneider, Shelley <shelley.schneider@nebraska.gov>  
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Carrie

**Carrie Wiese**

Carrie Wiese

Supervisor – Air Quality Grants, Planning and Outreach Unit

Nebraska Department of Environmental Quality

1200 N Street, Suite 400

Lincoln, NE 68508



(402)471-6624, [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)

**To:** Brown, Steven[Brown.Steven@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**Cc:** Bybee, Darcy[darcy.bybee@dnr.mo.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]; Keas, Ashley[Ashley.Keas@dnr.mo.gov]  
**From:** Bechtel, Cheri  
**Sent:** Tue 6/28/2016 4:43:29 PM  
**Subject:** FW: DRR for the 2010 1-hour SO2 NAAQS  
[attachment 1-sources-affected-by-drr.pdf](#)  
[DRR letter.pdf](#)

This bounced back due to the size of the attachments. Attached are some of the documents required for the July submittal. Attachments 2 and 3 will be forthcoming via ftp since they are larger.

Thanks,

Cheri Bechtel

Air Pollution Control Program

573-751-8308

[cheri.bechteldnr.mo.gov](mailto:cheri.bechteldnr.mo.gov)

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**From:** Bechtel, Cheri  
**Sent:** Tuesday, June 28, 2016 10:44 AM  
**To:** Brown.Steven@epamail.epa.gov; algae-eakin.amy@epa.gov  
**Cc:** Bybee, Darcy; Wilbur, Emily; Keas, Ashley  
**Subject:** DRR for the 2010 1-hour SO2 NAAQS

Attached are the DRR for the 2010 1-hour SO2 NAAQS and attachments. Please let me know if anything else is needed.

Thanks very much,

# Cheri Bechtel

Air Pollution Control Program

573-751-8308

[cheri.bechtel@dnr.mo.gov](mailto:cheri.bechtel@dnr.mo.gov)

*Promoting, Protecting and Enjoying our Natural Resources. Learn more at [dnr.mo.gov](http://dnr.mo.gov).*

**To:** Hall, Stephen[stephen.hall@dnr.mo.gov]  
**Cc:** Davis, Michael[Davis.Michael@epa.gov]; Brown, Steven[Brown.Steven@epa.gov]; Peter, David[peter.david@epa.gov]; patricia.maliro@dnr.mo.gov[patricia.maliro@dnr.mo.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Bybee, Darcy[darcy.bybee@dnr.mo.gov]; Moore, Kyra[kyra.moore@dnr.mo.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
**From:** Grooms, Leland  
**Sent:** Fri 5/27/2016 10:14:30 PM  
**Subject:** Re: MO 2016 Monitoring Network Plan Posted

Thanks Steve!

---

**From:** Hall, Stephen <stephen.hall@dnr.mo.gov>  
**Sent:** Friday, May 27, 2016 4:19:09 PM  
**To:** Grooms, Leland  
**Cc:** Davis, Michael; Brown, Steven; Peter, David; patricia.maliro@dnr.mo.gov; Algae-Eakin, Amy; Bybee, Darcy; Moore, Kyra; Hawkins, Andy; Wilbur, Emily  
**Subject:** MO 2016 Monitoring Network Plan Posted

Lee,

We posted the Missouri 2016 Monitoring Network Plan for public inspection today. It is available at the following link:

<http://dnr.mo.gov/env/apcp/airpollutants.htm#monitoringnetworkplan>

There is one slight change in the Buick SO<sub>2</sub> network based on a discussion we had with Doe Run staff this week. Rather than proposing the sawmill site, they proposed the location of the former SO<sub>2</sub> monitoring site used in their preconstruction PSD project several years ago (circa 2006). This location already has electrical power established and is located less than ¼ mile east of the sawmill site you visited. This former PSD monitoring site location is still in the area of modeled SO<sub>2</sub> impact. Historical preconstruction SO<sub>2</sub> monitoring data obtained at this location is summarized in our 2011 Monitoring Network Plan on pages 18 and 19 and is available at this link: <http://dnr.mo.gov/env/apcp/docs/2011monitoringnetwork.pdf>

Patricia Maliro will follow up with you next week regarding these details.

Stephen M. Hall

Air Quality Analysis Section Chief

Air Pollution Control Program

Missouri Department of Natural Resources

1659A E. Elm St., Jefferson City, MO 65102-0176

Phone: 573-526-1985

*Promoting, Protecting and Enjoying our Natural Resources. Learn more at [dnr.mo.gov](http://dnr.mo.gov).*

**To:** Grooms, Leland[Grooms.Leland@epa.gov]  
**Cc:** Davis, Michael[Davis.Michael@epa.gov]; Brown, Steven[Brown.Steven@epa.gov]; Peter, David[peter.david@epa.gov]; patricia.maliro@dnr.mo.gov[patricia.maliro@dnr.mo.gov]; Algoe-Eakin, Amy[Algoe-Eakin.Amy@epa.gov]; Bybee, Darcy[darcy.bybee@dnr.mo.gov]; Moore, Kyra[kyra.moore@dnr.mo.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
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**Sent:** Fri 5/27/2016 9:19:09 PM  
**Subject:** MO 2016 Monitoring Network Plan Posted

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Stephen M. Hall

Air Quality Analysis Section Chief

Air Pollution Control Program

Missouri Department of Natural Resources

1659A E. Elm St., Jefferson City, MO 65102-0176

Phone: 573-526-1985

**To:** Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]  
**From:** Bybee, Darcy  
**Sent:** Mon 4/18/2016 2:14:04 PM  
**Subject:** RE: Quarterly Meeting...  
possible agenda topics for April 2016.docx

Hi, Amy,

Attached is what we had drafted up...we could also discuss any rulemaking items that you all wanted (SSM/Opacity, CAIR rules, general rule status). Also, I think that Steve may have had some monitoring items as well...

I just got an email from Mike as well---I am responding similarly to him ☺

Thanks,

Darcy

Darcy A. Bybee

Air Pollution Control Program

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**From:** Algae-Eakin, Amy [mailto:Algae-Eakin.Amy@epa.gov]  
**Sent:** Monday, April 18, 2016 8:39 AM  
**To:** Bybee, Darcy  
**Subject:** RE: Quarterly Meeting...

Hi Darcy,

I was off on Friday as well.

Do you folks have thoughts on an agenda? I know we need to discuss SO2 & ozone status and perhaps some rulemaking related to SSM.. but what other items are you thinking?

**From:** Bybee, Darcy [<mailto:darcy.bybee@dnr.mo.gov>]  
**Sent:** Thursday, April 14, 2016 4:02 PM  
**To:** Algae-Eakin, Amy <[Algae-Eakin.Amy@epa.gov](mailto:Algae-Eakin.Amy@epa.gov)>  
**Subject:** RE: Quarterly Meeting...

Hi, Amy,

Just wanted to let you know that I'll be out of the office tomorrow—if you need anything for next Tuesday, both Emily and Wayne will be in the office ☺

Have a great weekend!

Thanks,

Darcy

Darcy A. Bybee

Air Pollution Control Program

*Promoting, Protecting and Enjoying our Natural Resources. Learn more at [dnr.mo.gov](http://dnr.mo.gov).*

**From:** Bybee, Darcy  
**Sent:** Thursday, April 14, 2016 9:04 AM



**To:** Algae-Eakin, Amy ([Algae-Eakin.Amy@epa.gov](mailto:Algae-Eakin.Amy@epa.gov))  
**Subject:** RE: Quarterly Meeting...

Hi, Amy,

If you all know more about the grants that were announced last week, that would be great. If not, we wouldn't probably add it to the agenda. We would have our F&B folks call in for that portion...

Thanks,

Darcy

Darcy A. Bybee

Air Pollution Control Program

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**From:** Algae-Eakin, Amy [<mailto:Algae-Eakin.Amy@epa.gov>]  
**Sent:** Wednesday, April 13, 2016 9:02 PM  
**To:** Bybee, Darcy  
**Subject:** Re: Quarterly Meeting...

Hi Darcy, do you think you'll want to talk grant funding on Tuesday?

Sent from my iPhone

On Apr 13, 2016, at 2:58 PM, Bybee, Darcy <[darcy.bybee@dnr.mo.gov](mailto:darcy.bybee@dnr.mo.gov)> wrote:

Hi, Amy,

I was just checking in on your thoughts for an agenda for next week's meeting - I know that we brought it up during our call, but I just realized that we haven't yet lined out our travel plans from the APCP. Depending on the level of 'Rule-type' topics, Wayne may or may not attend.

He is fine with being on-call until we finalize the agenda, and just deciding later this week, but I told him I would check in with you 😊

Thanks!!

Darcy

Darcy A. Bybee

Air Quality Planning Section Chief

Air Pollution Control Program

Missouri Department of Natural Resources

P.O. Box 176

Jefferson City, MO 65102-0176

Direct: (573) 751-7946

General Phone: (573) 751-4817 Fax: (573) 751-2706

[darcy.bybee@dnr.mo.gov](mailto:darcy.bybee@dnr.mo.gov)

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**To:** jlcitta@nppd.com[jlcitta@nppd.com];  
carrie.wiese@nebraska.gov[carrie.wiese@nebraska.gov];  
dennis.wright@stinsonleonard.com[dennis.wright@stinsonleonard.com];  
javanek@nppd.com[javanek@nppd.com]; hlhadla@nppd.com[hlhadla@nppd.com];  
mjspenc@nppd.com[mjspenc@nppd.com]  
**Cc:** Hawkins, Andy[hawkins.andy@epa.gov]; Algoe-Eakin, Amy[Algoe-Eakin.Amy@epa.gov];  
Peter, David[peter.david@epa.gov]  
**From:** Avey, Lance  
**Sent:** Wed 4/6/2016 4:24:51 PM  
**Subject:** Guidance to establish 1-hr SO2 modeled emissions and permit limit

All,

Below is a link to the Modeling TAD for implementing the 2010 1-hr SO2 NAAQS:

<https://www3.epa.gov/airquality/sulfurdioxide/pdfs/SO2ModelingTAD.pdf>

Within the TAD, Section 5.4 has a brief discussion on use of allowable emissions in designation modeling. Further detailed information on the methodology to develop a modeled emissions rate and permitted emission limit is provided in EPA's Guidance for 1-Hour SO2 Nonattainment Areas SIP Submissions:

<https://www3.epa.gov/airquality/sulfurdioxide/pdfs/20140423guidance.pdf>

The guidance describes and gives an example on how to develop a "critical" 1-hr modeled emissions rate to establish a new permit limit (i.e., 30 day rolling average) that account for variations in operations and sulfur content (i.e., variability analysis).

Please let us know if you have questions or want further discussions on the these guidance documents.

Thanks

Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7809

avey.lance@epa.gov

**To:** Wilbur, Emily[emily.wilbur@dnr.mo.gov]; Abdul, Assem[assem.abdul@dnr.mo.gov]  
**Cc:** patricia.maliro@dnr.mo.gov[patricia.maliro@dnr.mo.gov]; Hall, Stephen[stephen.hall@dnr.mo.gov]; Avey, Lance[Avey.Lance@epa.gov]; Peter, David[peter.david@epa.gov]; Algoe-Eakin, Amy[Algoe-Eakin.Amy@epa.gov]; Grooms, Leland[Grooms.Leland@epa.gov]; Bybee, Darcy[darcy.bybee@dnr.mo.gov]  
**From:** Hawkins, Andy  
**Sent:** Fri 3/4/2016 7:30:50 PM  
**Subject:** RE: monitoring siting

Thanks Emily!

Yes the discussion with Assem was very helpful to understand what was happening in the technical analysis.

Andy Hawkins

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7179 office

[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)

**From:** Wilbur, Emily [mailto:emily.wilbur@dnr.mo.gov]  
**Sent:** Friday, March 04, 2016 1:28 PM  
**To:** Hawkins, Andy <hawkins.andy@epa.gov>; Abdul, Assem <assem.abdul@dnr.mo.gov>  
**Cc:** patricia.maliro@dnr.mo.gov; Hall, Stephen <stephen.hall@dnr.mo.gov>; Avey, Lance <Avey.Lance@epa.gov>; Peter, David <peter.david@epa.gov>; Algoe-Eakin, Amy <Algoe-Eakin.Amy@epa.gov>; Grooms, Leland <Grooms.Leland@epa.gov>; Bybee, Darcy <darcy.bybee@dnr.mo.gov>  
**Subject:** RE: monitoring siting

Hi Andy,

Sorry I missed your call yesterday. I was at the Regform meeting. But it sounds like you spoke with Assem and he was able to help you with our modeling analysis. I have placed all of our Buick modeling files/analyses on our ftp site. You should be getting a separate email for that. If you do not receive it, please let me know. We are drafting a report to go along with it, but since it's still in draft, I did not include the document. We hope to be finished with it soon. But the supporting files should all be contained in the ftp package I sent you.

If you have any questions on the modeling, please let me know!

Thanks,

Emily

**From:** Hawkins, Andy [<mailto:hawkins.andy@epa.gov>]

**Sent:** Thursday, March 03, 2016 9:45 AM

**To:** Wilbur, Emily; Abdul, Assem

**Cc:** Maliro, Patricia; Hall, Stephen; Avey, Lance; Peter, David; Algoe-Eakin, Amy; Grooms, Leland

**Subject:** FW: monitoring siting

Emily/Assem,

Does the attached preliminary map modeling summary reflect the results of MDNR's technical analysis? Do you know if this modeling reflects the onsite met data at BRRF? Was a frequency analysis of daily maximums also performed? The statement below "we imagine placing two monitors", does that mean two monitors in addition to the current monitor location?

Any information you can provide on this attached modeling map or your modeling would be much appreciated as it appears preliminary sites are being selected and this is the first Lance or I have seen an analysis supporting monitor locations. Last I knew, via phone discussions with Assem, he had identified via modeling using TAD guidance some predicted locations higher than the current monitoring location, but I've not seen any of the MDNR modeling or results.

Lance and I will need to understand the basis of these model results and it would be good to have that information to inform Lee's visit, if possible.

TIA,  
Andy

Andy Hawkins

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7179 office

[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)

**From:** Peter, David

**Sent:** Wednesday, March 02, 2016 1:30 PM

**To:** Algoe-Eakin, Amy <[Algoe-Eakin.Amy@epa.gov](mailto:Algoe-Eakin.Amy@epa.gov)>

**Cc:** Hawkins, Andy <[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)>; Avey, Lance <[Avey.Lance@epa.gov](mailto:Avey.Lance@epa.gov)>; Meyer, Jonathan <[Meyer.Jonathan@epa.gov](mailto:Meyer.Jonathan@epa.gov)>

**Subject:** FW: monitoring siting

FYI...

**From:** Maliro, Patricia [<mailto:patricia.maliro@dnr.mo.gov>]

**Sent:** Wednesday, March 02, 2016 1:27 PM

**To:** Grooms, Leland <[Grooms.Leland@epa.gov](mailto:Grooms.Leland@epa.gov)>

**Cc:** Peter, David <[peter.david@epa.gov](mailto:peter.david@epa.gov)>; Hall, Stephen <[stephen.hall@dnr.mo.gov](mailto:stephen.hall@dnr.mo.gov)>; Giroir, Eric <[eric.giroir@dnr.mo.gov](mailto:eric.giroir@dnr.mo.gov)>

**Subject:** FW: monitoring siting

Lee,

Eric Giroir in monitoring unit has arranged with Doe Run Buick to review potential SO2 monitoring sites near BRRF on Monday, March 7, 2016. Please let us know if your schedule will allow you join Eric on this trip; we can forward you additional contact information regarding the trip. A preliminary map from Doe Run Buick showing possible locations for monitoring is attached.

Thank you and let me know if you have any questions.

Patricia Maliro

Air Monitoring Unit Chief

Air Pollution Control Program

Missouri Department of Natural Resources

1659 East Elm St. Jefferson City, MO 65102

(573) 751-0750

[patricia.maliro@dnr.mo.gov](mailto:patricia.maliro@dnr.mo.gov)

*Promoting, Protecting and Enjoying our Natural Resources. Learn more at [dnr.mo.gov](http://dnr.mo.gov).*

**From:** Crocker, Margaret [<mailto:mcrocker@doerun.com>]

**Sent:** Tuesday, February 02, 2016 5:04 PM

**To:** Wilbur, Emily

**Cc:** [joseph@shellengr.com](mailto:joseph@shellengr.com); Hall, Stephen; Bybee, Darcy; Abdul, Assem; Maliro, Patricia; Bodnar, Gen

**Subject:** RE: monitoring siting

Hi all,



I have attached a preliminary map showing the top 100 receptors (Average 4<sup>th</sup> highest modeled concentrations) in red. They are concentrated directly west of the plant entrance and east of the facility along the ambient boundary. At this point we imagine placing two monitors. One monitor directly across from the facility's entrance from Hwy KK on Doe Run Property and another monitor near the eastern ambient border, in the southern 1/3 of the red receptors, which is also Doe Run property.

If you have questions about this map or the proposed locations please let me know. I will coordinate a visit with the monitoring unit and we will look at the specific locations then.

Thanks,

Maggie Crocker

*EHS Analyst*

The Doe Run Company

573-626-3499

**To:** Peter, David[peter.david@epa.gov]  
**Cc:** Schneider, Shelley[shelley.schneider@nebraska.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Jay, Michael[Jay.Michael@epa.gov]; Wharton, Tracy[tracy.wharton@nebraska.gov]  
**From:** Wiese, Carrie  
**Sent:** Thur 3/3/2016 9:23:43 PM  
**Subject:** RE: Lon D Wright Facility SO2 Emissions

Good afternoon, Peter:

Upon further analysis, we see that the acid rain database for 2015 shows Unit 8 emitted a total of 989 tons of SO<sub>2</sub>; assuming the other units emitted similar amounts in 2015 as they did in 2014 (a reasonable assumption, given past performance), we would expect the total emissions for 2015 to be on the order of 1,700 tons. We have not yet received the 2015 emissions inventory but expect it soon (it is due by March 31), and we feel confident that with the current controls in place, the facility will remain below the 2,000 tpy threshold.

We will plan to follow up with you once we've received the 2015 NEI data, and can schedule a call at that time. Does this work for you?

Thanks!

Carrie Wiese

Carrie Wiese

Supervisor – Air Quality Grants, Planning and Outreach Unit

Nebraska Department of Environmental Quality

1200 N Street, Suite 400

Lincoln, NE 68508

(402)471-6624, [carrie.wiese@nebraska.gov](mailto:carrie.wiese@nebraska.gov)

**From:** Peter, David [mailto:peter.david@epa.gov]  
**Sent:** Tuesday, March 01, 2016 11:24 AM  
**To:** Wiese, Carrie  
**Cc:** Schneider, Shelley; Algae-Eakin, Amy; Jay, Michael  
**Subject:** RE: Lon D Wright Facility SO2 Emissions

Carrie,

A month or so ago, I compared the 2014 NEI to each state's DRR list in Region 7 and discovered that the Lon D Wright facility reported SO<sub>2</sub> emissions greater than 2,000 tpy in 2014 and was not included in NDEQ's DRR list. You and I had some correspondence on this facility (see emails below). Recently, HQ staff did the same comparison of the 2014 NEI and each state's DRR list and they brought up the Lon D Wright facility. I therefore took another look at this facility.

It appears that the facility consists of three coal fired units – Boilers 6, 7 and 8. The city of Fremont reported the following SO<sub>2</sub> emissions in the 2014 NEI – Boiler 6 (253 tons), Boiler 7 (383 tons) and Boiler 8 (1,595 tons). Further, Fremont reported a facility-wide total of 2,232 tons of SO<sub>2</sub>. Since Boiler 8 is the only unit subject to the Acid Rain Program, the Fremont was only required to report Boiler 8 SO<sub>2</sub> emissions in CAMD – thus, the difference between the emissions reported in the NEI and CAMD.

DRR applicability is based on the facility-wide SO<sub>2</sub> emissions. 40 CFR 51.1202 states that “(t)his subpart applies to any air agency in whose jurisdiction is located one or more applicable sources of SO<sub>2</sub> emissions that have annual actual SO<sub>2</sub> emissions of 2,000 tons or more...For the purposes of this subpart, the subject air agency shall identify applicable sources of SO<sub>2</sub> based on the most recently available annual SO<sub>2</sub> emissions data for such sources.” Therefore, based on “the most recently available annual SO<sub>2</sub> emissions”, the 2014 NEI, it appears that NDEQ should have included the Lon D Wright facility on its DRR list.

You mentioned in your email below that you expect to receive the 2015 emission submittal by March 31, 2016. Have you received this submittal yet? If so, are the facility-wide SO<sub>2</sub> emissions less than 2,000 tons? If haven't received the 2015 emission submittal, do you have any indication whether the 2015 SO<sub>2</sub> emissions are less than 2,000 tons?

It is my understanding that Fremont is in the process of installing or has installed a scrubber on Boiler 8, primarily for MATS compliance. This control system will have the benefit of controlling SO<sub>2</sub> emissions. However, it is also my understanding that the control system is either currently being installed or was installed in late 2015/early 2016, and the SO<sub>2</sub> emission reductions will likely not be reflected in the 2015 emission inventory.

This new control system can certainly be considered when conducting the air quality characterization required by the DRR. Sources have three options to comply with the DRR – conduct monitoring, conduct modeling or establish a federally enforceable limit of 2,000 tpy. Should the Lon D Wright facility ultimately be added to the DRR list, the permit issued to the facility may already limit the SO<sub>2</sub> emissions to less than 2,000 tpy, thus satisfying the requirements of the DRR. However, even if that is the case, it still appears, at this point, that the Lon D Wright facility should be added to NDEQ's DRR list.

After you have had a chance to consider the above, I can setup a conference call to discuss it further if you would like.

David Peter

Environmental Engineer

U.S. EPA Region 7, Air Permitting Branch

11201 Renner Boulevard

Lenexa, KS 66219

913-551-7397

**From:** Wiese, Carrie [mailto:carrie.wiese@nebraska.gov]  
**Sent:** Wednesday, January 27, 2016 3:18 PM  
**To:** Peter, David <peter.david@epa.gov>  
**Cc:** Schneider, Shelley <shelley.schneider@nebraska.gov>  
**Subject:** RE: Lon D Wright Facility SO<sub>2</sub> Emissions

Hi David,

In reviewing this information with Shelley Schneider, she indicated that she used the CAMD data because it is based on CEM data submitted quarterly. Additionally, there has been a scrubber installed at this facility which will decrease SO<sub>2</sub>.

If you'd like, we can let you know what the 2015 emissions report indicates when it is submitted. The deadline is March 31.

Thanks,  
Carrie

**From:** Peter, David [<mailto:peter.david@epa.gov>]  
**Sent:** Wednesday, January 27, 2016 1:23 PM  
**To:** Wiese, Carrie  
**Subject:** Lon D Wright Facility SO<sub>2</sub> Emissions

Carrie,

As we discussed on the phone today, I am trying to confirm the actual SO<sub>2</sub> emissions from the Lon D Wright Facility in Fremont, NE. EPA's Emission Inventory System lists the CY 2014 SO<sub>2</sub> emissions as 2,232 tons. I believe that this value comes from what the facility submitted to NDEQ as part of their annual emission inventory. I did look at the CAMD data and it appears to indicate that the facility emitted 1,595 tons for CY 2014. Further, it appears that the SO<sub>2</sub> emissions reported to CAMD has never exceeded 2,000 tons in a CY since at least 1997.

Could you or one of your staff members please confirm the actual CY 2014 (or CY 2015) SO<sub>2</sub> emissions from the Lon D Wright Facility? As we discussed, this is not pressing and a response in the next few weeks would be fine.

Just as an FYI, I am not suggesting that this facility should be on the DRR list.

David Peter

Environmental Engineer

U.S. EPA Region 7, Air Permitting Branch

11201 Renner Boulevard

Lenexa, KS 66219

913-551-7397

**To:** Wilbur, Emily[emily.wilbur@dnr.mo.gov]; Abdul, Assem[assem.abdul@dnr.mo.gov]  
**Cc:** patricia.maliro@dnr.mo.gov[patricia.maliro@dnr.mo.gov];  
stephen.hall@dnr.mo.gov[stephen.hall@dnr.mo.gov]; Avey, Lance[Avey.Lance@epa.gov]; Peter,  
David[peter.david@epa.gov]; Algoe-Eakin, Amy[Algoe-Eakin.Amy@epa.gov]; Grooms,  
Leland[Grooms.Leland@epa.gov]  
**From:** Hawkins, Andy  
**Sent:** Thur 3/3/2016 3:45:22 PM  
**Subject:** FW: monitoring siting  
BRRF-SO2 Monitor Siting-Prelim Locations-Feb022016-2.pdf

Emily/Assem,

Does the attached preliminary map modeling summary reflect the results of MDNR's technical analysis? Do you know if this modeling reflects the onsite met data at BRRF? Was a frequency analysis of daily maximums also performed? The statement below "we imagine placing two monitors", does that mean two monitors in addition to the current monitor location?

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TIA,  
Andy

Andy Hawkins

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7179 office

[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)

**From:** Peter, David  
**Sent:** Wednesday, March 02, 2016 1:30 PM  
**To:** Algae-Eakin, Amy <Algae-Eakin.Amy@epa.gov>  
**Cc:** Hawkins, Andy <hawkins.andy@epa.gov>; Avey, Lance <Avey.Lance@epa.gov>; Meyer, Jonathan <Meyer.Jonathan@epa.gov>  
**Subject:** FW: monitoring siting

FYI...

**From:** Maliro, Patricia [<mailto:patricia.maliro@dnr.mo.gov>]  
**Sent:** Wednesday, March 02, 2016 1:27 PM  
**To:** Grooms, Leland <[Grooms.Leland@epa.gov](mailto:Grooms.Leland@epa.gov)>  
**Cc:** Peter, David <[peter.david@epa.gov](mailto:peter.david@epa.gov)>; Hall, Stephen <[stephen.hall@dnr.mo.gov](mailto:stephen.hall@dnr.mo.gov)>; Giroir, Eric <[eric.giroir@dnr.mo.gov](mailto:eric.giroir@dnr.mo.gov)>  
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Lee,

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Thank you and let me know if you have any questions.

Patricia Maliro

Air Monitoring Unit Chief

Air Pollution Control Program



Missouri Department of Natural Resources

1659 East Elm St. Jefferson City, MO 65102

(573) 751-0750

[patricia.maliro@dnr.mo.gov](mailto:patricia.maliro@dnr.mo.gov)

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**From:** Crocker, Margaret [<mailto:mcrocker@doerun.com>]

**Sent:** Tuesday, February 02, 2016 5:04 PM

**To:** Wilbur, Emily

**Cc:** [joseph@shellengr.com](mailto:joseph@shellengr.com); Hall, Stephen; Bybee, Darcy; Abdul, Assem; Maliro, Patricia; Bodnar, Gen

**Subject:** RE: monitoring siting

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Maggie Crocker

*EHS Analyst*

The Doe Run Company

573-626-3499

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**Cc:** Schneider, Shelley[shelley.schneider@nebraska.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Jay, Michael[Jay.Michael@epa.gov]  
**From:** Peter, David  
**Sent:** Tue 3/1/2016 5:23:32 PM  
**Subject:** RE: Lon D Wright Facility SO2 Emissions

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David Peter

Environmental Engineer

U.S. EPA Region 7, Air Permitting Branch

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Lenexa, KS 66219

913-551-7397

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**Sent:** Wednesday, January 27, 2016 3:18 PM  
**To:** Peter, David <peter.david@epa.gov>  
**Cc:** Schneider, Shelley <shelley.schneider@nebraska.gov>  
**Subject:** RE: Lon D Wright Facility SO<sub>2</sub> Emissions

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**To:** Wiese, Carrie  
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David Peter

Environmental Engineer

U.S. EPA Region 7, Air Permitting Branch

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Lenexa, KS 66219

913-551-7397

**To:** Peter, David[peter.david@epa.gov]  
**Cc:** Kemp, Lachala[Kemp.Lachala@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Avey, Lance[Avey.Lance@epa.gov]; Meyer, Jonathan[Meyer.Jonathan@epa.gov]  
**From:** Wilbur, Emily  
**Sent:** Fri 10/16/2015 1:56:27 PM  
**Subject:** RE: follow-up to call on SO2

Thanks, David!

**From:** Peter, David [mailto:peter.david@epa.gov]  
**Sent:** Friday, October 16, 2015 8:01 AM  
**To:** Wilbur, Emily  
**Cc:** Kemp, Lachala; Algae-Eakin, Amy; Hawkins, Andy; Avey, Lance; Meyer, Jonathan  
**Subject:** FW: follow-up to call on SO2

Emily,

I am following up on a couple of questions that you had previously asked.

(1) Question #1 below – Is the 2,000 tpy limit to avoid modeling or monitoring in accordance with the DRR on a calendar year basis or 12-month basis?

I checked with HQ on this one. The response that I got back was that, consistent with longstanding EPA practice, such a limit may not simply be an annual cap on emissions. The averaging time for any such limitation for a source should be short and should generally not exceed a 30-day limit. In some cases, a state may be able to justify use of an annual emission limit, so long as the limit is a rolling average limit, rolled a minimum of every 30 days, and so long as the state can demonstrate the practical enforceability of the limit. The limitation must also be accompanied by monitoring, reporting and recordkeeping (MRR) requirements that enable an agency to verify the source's compliance with its limits. (See "Guidance on Limiting Potential to Emit in New Source Permitting" issued by Terrell E. Hunt, Associate Enforcement Counsel, Air Enforcement Division, Office of Enforcement and John S. Seitz, Stationary Source Compliance Division, Office of Air Quality Planning and Standards, June 13, 1989.)

So in other words, the limit can't be a calendar year limit.

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David Peter

Environmental Engineer

U.S. EPA Region 7, Air Permitting Branch

11201 Renner Boulevard

Lenexa, KS 66219

913-551-7397

**From:** Peter, David

**Sent:** Thursday, September 24, 2015 10:30 AM

**To:** 'Wilbur, Emily' <[emily.wilbur@dnr.mo.gov](mailto:emily.wilbur@dnr.mo.gov)>

**Cc:** Kemp, Lachala <[Kemp.Lachala@epa.gov](mailto:Kemp.Lachala@epa.gov)>; Hawkins, Andy <[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)>;

Avey, Lance <[Avey.Lance@epa.gov](mailto:Avey.Lance@epa.gov)>; Algoe-Eakin, Amy <[Algoe-Eakin.Amy@epa.gov](mailto:Algoe-Eakin.Amy@epa.gov)>;

Meyer, Jonathan <[meyer.jonathan@epa.gov](mailto:meyer.jonathan@epa.gov)>

**Subject:** RE: follow-up to call on SO<sub>2</sub>

Emily – Below are my responses to your second set of questions and your additional question on the timing of the 2,000 tpy federally enforceable limits for Round 3 sources. If you have any questions on the responses, let me know. David



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**From:** Wilbur, Emily [<mailto:emily.wilbur@dnr.mo.gov>]

**Sent:** Tuesday, September 08, 2015 11:10 AM

**To:** Kemp, Lachala

**Cc:** Peter, David

**Subject:** follow-up to call on SO<sub>2</sub>

Hi Lachala,

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If you need clarification on any of these questions, please let me know.

Thanks,

Emily Wilbur

State Implementation Plan Unit Chief

Air Pollution Control Program

(573) 751-4817 general

(573) 751-7725 direct line

(573) 751-2706 FAX

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**To:** Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
**Cc:** Kemp, Lachala[Kemp.Lachala@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Avey, Lance[Avey.Lance@epa.gov]; Meyer, Jonathan[Meyer.Jonathan@epa.gov]  
**From:** Peter, David  
**Sent:** Fri 10/16/2015 1:01:13 PM  
**Subject:** FW: follow-up to call on SO2

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David Peter

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11201 Renner Boulevard

Lenexa, KS 66219

913-551-7397

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**To:** 'Wilbur, Emily' <emily.wilbur@dnr.mo.gov>

**Cc:** Kemp, Lachala <Kemp.Lachala@epa.gov>; Hawkins, Andy <hawkins.and@epa.gov>; Avey, Lance <Avey.Lance@epa.gov>; Algoe-Eakin, Amy <Algoe-Eakin.Amy@epa.gov>; Meyer, Jonathan <meyer.jonathan@epa.gov>

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**From:** Wilbur, Emily [<mailto:emily.wilbur@dnr.mo.gov>]

**Sent:** Tuesday, September 08, 2015 11:10 AM

**To:** Kemp, Lachala

**Cc:** Peter, David

**Subject:** follow-up to call on SO2

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**From:** Wilbur, Emily  
**Sent:** Fri 9/25/2015 2:44:03 PM  
**Subject:** RE: follow-up to call on SO2

Thanks, David, for the follow-up. This is very helpful. We will convey the information to our affected sources.

Thanks,

Emily

**From:** Peter, David [mailto:peter.david@epa.gov]  
**Sent:** Thursday, September 24, 2015 10:30 AM  
**To:** Wilbur, Emily  
**Cc:** Kemp, Lachala; Hawkins, Andy; Avey, Lance; Algae-Eakin, Amy; Meyer, Jonathan  
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**From:** Peter, David  
**Sent:** Thur 9/24/2015 3:30:11 PM  
**Subject:** RE: follow-up to call on SO2

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**Cc:** Peter, David  
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**From:** Wilbur, Emily  
**Sent:** Mon 9/14/2015 1:51:28 PM  
**Subject:** RE: follow-up to call on SO2

Thanks for the clarification! We are getting quite a few inquiries about the process we will be taking to set the necessary limits so this is very timely. We appreciate the response.

Thanks,

Emily

**From:** Peter, David [mailto:peter.david@epa.gov]  
**Sent:** Monday, September 14, 2015 7:59 AM  
**To:** Wilbur, Emily  
**Cc:** Kemp, Lachala; Algae-Eakin, Amy; Hawkins, Andy; Avey, Lance; Meyer, Jonathan; Bhesania, Amy  
**Subject:** RE: follow-up to call on SO2

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In accordance with 40 CFR 51.1203, if a state utilizes federally enforceable limits to avoid an air quality characterization for a source/area, the state is required to submit documentation to EPA showing that such requirements are federally enforceable. I would assume that the issues listed above will be considered during this review.

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David Peter

Environmental Engineer

U.S. EPA Region 7, Air Permitting Branch

11201 Renner Boulevard

Lenexa, KS 66219

913-551-7397

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*source preconstruction permits, Title V Permits, and federally enforceable state operating permits which are not directly in the SIP. Commenter (0106) stated that inclusion of limits in the SIP is a waste of resources and creates an unnecessary and lengthy process if changes to the limits are required.*

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*attention on the emission limit being imposed on that particular facility and the emission reduction control technologies and operational restrictions required to meet that limit. The review and comment on appropriate emission limits should remain associated with the issuance of an individual facility emissions operating permit.*

*Additionally, the EPA has not identified a need for the departure from permit emission limits to SIP emission limits. The EPA has the opportunity to review and comment on Title V permits before they are issued, and the permit limits are federally enforceable. Since those emission limits are already federally enforceable, what need is there to include those emission limits in the SIP itself? (0089)*

*Response:*

*The final rule allows the air agency to meet the requirements of this rule by submitting a federally enforceable emissions limitation (e.g., source-specific SIP revision or minor NSR permit revision) to the EPA prior to January 13, 2017 that requires the affected source to reduce allowable emissions at the source to an annual rate below the 2,000 tpy threshold level prior to January 13, 2017. By July 1, 2016, the air agency would be required to identify the sources on the list for which it would be using such an approach as an alternative to modeling or monitoring. For such a source identified on the list, if the affected air agency has adopted and the source has become subject to effective federally enforceable control measures lowering emissions below 2,000 tpy by January 13, 2017, the air agency will generally not be required to further characterize the impacts from the source's emissions solely due to its size as of January 15, 2016. Note that this provision of the final rule was established after consideration of several comments suggesting this type of change from the proposal.*

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**From:** Wilbur, Emily [<mailto:emily.wilbur@dnr.mo.gov>]



**Sent:** Tuesday, September 08, 2015 11:10 AM  
**To:** Kemp, Lachala  
**Cc:** Peter, David  
**Subject:** follow-up to call on SO2

Hi Lachala,

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If you need clarification on any of these questions, please let me know.

Thanks,

Emily Wilbur

State Implementation Plan Unit Chief

Air Pollution Control Program

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(573) 751-7725 direct line

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**To:** Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
**Cc:** Kemp, Lachala[Kemp.Lachala@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Avey, Lance[Avey.Lance@epa.gov]; Meyer, Jonathan[Meyer.Jonathan@epa.gov]; Bhesania, Amy[Bhesania.Amy@epa.gov]  
**From:** Peter, David  
**Sent:** Mon 9/14/2015 12:58:49 PM  
**Subject:** RE: follow-up to call on SO2

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**Sent:** Tuesday, September 08, 2015 11:10 AM  
**To:** Kemp, Lachala  
**Cc:** Peter, David  
**Subject:** follow-up to call on SO2

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**To:** Hawkins, Andy[hawkins.andy@epa.gov]  
**Cc:** Peter, David[peter.david@epa.gov]; Avey, Lance[Avey.Lance@epa.gov]; Algae-Eakin, Amy[Algae-Eakin.Amy@epa.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
**From:** Vit, Wendy  
**Sent:** Tue 8/25/2015 9:26:41 PM  
**Subject:** RE: SO2 data request

Hi Andy. It shouldn't be a problem to pull this information together for you. Right now we're focused on our public and commission process for the proposed SO2 boundary recommendation options, but we'll follow up with you in late September when we've gotten through this portion of the process. Thanks.

Wendy Vit  
Air Quality Planning Section Chief  
Air Pollution Control Program  
Missouri Department of Natural Resources  
(573) 526-3167  
[wendy.vit@dnr.mo.gov](mailto:wendy.vit@dnr.mo.gov)

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**From:** Hawkins, Andy [mailto:hawkins.andy@epa.gov]  
**Sent:** Tuesday, August 25, 2015 2:17 PM  
**To:** Wilbur, Emily  
**Cc:** Vit, Wendy; Peter, David; Avey, Lance; Algae-Eakin, Amy  
**Subject:** SO2 data request

Emily/Wendy,

I have an additional data request concerning your SO2 proposed options for area boundary recommendations.

For the Iron County area, can you please provide me the hourly main stack CEM data and hourly (or finer) MET data that are required to be collected at Doe Run Buick per the MO permit # 062011-004, Permit # 012005-008, special condition 31, issued January 26, 2005, and 2013 Consent Judgment section V.9.C I would like to see CEM and MET data gathered from 2012-present, as available, in a .csv, .xls, or some electronic format that can be reasonably processed (i.e. not a .pdf file containing the data). In addition, any modeling or other technical analysis performed in the past that supports the current SO2 monitor placement represents a maximum concentration area around Buick would be helpful. It is also unclear to me if the main stack is the only source of SO2 at this facility. In the permit it states 60-70 % of S entering the furnace will be emitted and thus scrubbed, but it is unclear if the remainder of the S is lost to fugitive emissions or captured elsewhere. It does appear that the main stack is the only controlled SO2 source. A summary of the latest SO2 EI by release point would also be useful or a description of the % of facility wide SO2 that is passing through the main stack.

Thanks,

Andy

Andy Hawkins

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

(913) 551-7179 office

[hawkins.andy@epa.gov](mailto:hawkins.andy@epa.gov)

**To:** Bybee, Darcy (darcy.bybee@dnr.mo.gov)[darcy.bybee@dnr.mo.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
**Cc:** David Peter (peter.david@epa.gov)[peter.david@epa.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Steven Brown[Brown.Steven@epa.gov]; Avey, Lance[Avey.Lance@epa.gov]  
**From:** Algae-Eakin, Amy  
**Sent:** Wed 7/13/2016 8:09:24 PM  
**Subject:** FYI- Region 7 Comments on MDNR DRR modeling protocol

Emily and Darcy,

Thank you for providing the protocol for DRR modeling. Overall, Andy has reviewed and believes the document looks good.

We consider the comments below informal, as we believe the DRR modeling protocol is a living document. It is our desire to be reasonable and work with you to address issues which may invariably arise and the modeling protocol may need to be adjusted.

For specifics related to the comments below, please feel free to directly discuss with Andy.

1. Section 3.3 if the department is aware of fixed release parameters different than in MoEIS they should be evaluated for use. For example, RATA data contains stack parameters at varying loads. There may be other stack testing data the department has that can be used. MDNR should attempt to avoid using stack parameters not reflecting normal actual operations that may lead to under predicted modeling concentrations. Modeling with stack parameters under varying load scenarios may be appropriate if stack temp and exit velocity parameters are fixed while emissions vary. This is especially true if the modeled design value is close to the NAAQS or if there is wide range of stack exit conditions that can't be represented by a fixed parameter.

2. Section 3.4 A hot spot analysis may be necessary if high modeled results occur in areas with large receptor spacing distance. This might occur for those sources with tall stacks whose maximum impacts may extend downwind and in areas of terrain or next to other smaller sources of SO<sub>2</sub> emissions where there is an interaction.

3. Section 3.6 please consider specifying if monthly or seasonal assignments will be used in AERSURFACE.

4. Section 4.1 – please work with EPA should the background methodology vary substantially over past MDNR analysis. We agree that each area should be evaluated independently and discussed in the final report.

5. Pg 18 contains this statement...All monitors being sited to comply with the DRR must be operational no later than January 1, 2017. Should any new monitors not be operational by that date, the source will move to the modeling pathway to characterize air quality and the analysis will follow this protocol for modeled sources. – There is uncertainty about this statement and we might want to talk about this further to understand context.

**Amy Algoe-Eakin, Section Chief**

U.S. EPA Region 7

Air & Waste Management Division

Air Planning and Development Branch

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11201 Renner Boulevard, Lenexa KS 66219  
[alqoe-eakin.amy@epa.gov](mailto:alqoe-eakin.amy@epa.gov)



**To:** YOSHIMURA, GWEN[Yoshimura.Gwen@epa.gov]; Roland Gutierrez[roland.gutierrez@epa.guam.gov]  
**Cc:** Bohnenkamp, Carol[Bohnenkamp.Carol@epa.gov]; conchita.taitano@epa.guam.gov[conchita.taitano@epa.guam.gov]; Drake, Kerry[Drake.Kerry@epa.gov]; LIMAYE, VIJAY[Limaye.Vijay@epa.gov]; Sylvia L Ipanag[sipanag@gpagwa.com]; Roger U. Pabunan[rpabunan@gpagwa.com]; Norbert M. Madrazo[nmadrazo@gpagwa.com]; Luong Truong[luong.truong@epa.guam.gov]; Paz A Tison[mtison@gpagwa.com]  
**From:** Noel P. Cruz  
**Sent:** Tue 6/14/2016 10:39:52 PM  
**Subject:** Discuss Guam SO2 Modeling Protocol

Hi Gwen / Roland,

Please see our consultant's reply to the question 2 below.

Question 2: Please clarify how Guam EPA/EPA will be notified of re-located receptors, and whether an explanation of the reasons for relocation (characteristics of the locations, etc) will be included.

Reply: TRC will run the modeling analyses as proposed in the modeling protocol and will determine the appropriate design value resulting from the analyses. The receptor where the design value concentration is predicted to occur will be viewed on a satellite map of the area to determine if the specific point is accessible and appropriate for monitor siting. If it is, the design concentration will be reported as modeled.

In the event that the receptor is located on a water body, inaccessible location, or a point where a monitor cannot physically be located, a new receptor will be placed at the nearest point where a monitor can be located and the concentration at that receptor will be determined consistent with the modeling protocol. TRC will document any receptor determined to be inaccessible and will discuss the receptors in question with GEPA and USEPA before finalizing the modeling report.

With regards to question 1, the Final Modeling Protocol was emailed to you yesterday with Appendices C and D.

Please let us know if you have any comments or further questions.

**Noel P. Cruz** CESCO,CWMP

Engineer II (Environmental)

Planning & Regulatory

Guam Power Authority

[Ncruz1@gpagwa.com](mailto:Ncruz1@gpagwa.com)

Tel: (671) 648-3030

Fax: (671) 648-3167

**From:** Noel P. Cruz

**Sent:** Tuesday, June 14, 2016 2:56 PM

**To:** 'YOSHIMURA, GWEN' <Yoshimura.Gwen@epa.gov>; 'Roland Gutierrez' <roland.gutierrez@epa.guam.gov>

**Cc:** 'Bohnenkamp, Carol' <Bohnenkamp.Carol@epa.gov>; 'conchita.taitano@epa.guam.gov' <conchita.taitano@epa.guam.gov>; 'Drake, Kerry' <Drake.Kerry@epa.gov>; 'LIMAYE, VIJAY' <Limaye.Vijay@epa.gov>; Sylvia L Ipanag <sipanag@gpagwa.com>; Roger U. Pabunan <rpabunan@gpagwa.com>; Norbert M. Madrazo <nmadrazo@gpagwa.com>; 'Luong Truong' <luong.truong@epa.guam.gov>

**Subject:** Discuss Guam SO2 Modeling Protocol

Gwen/Roland,

Appendix D ...last email attachment.

-noel

**From:** Noel P. Cruz

**Sent:** Tuesday, June 14, 2016 2:46 PM

**To:** 'YOSHIMURA, GWEN' <Yoshimura.Gwen@epa.gov>; 'Roland Gutierrez' <roland.gutierrez@epa.guam.gov>

**Cc:** 'Bohnenkamp, Carol' <Bohnenkamp.Carol@epa.gov>; 'conchita.taitano@epa.guam.gov' <conchita.taitano@epa.guam.gov>; 'Drake, Kerry' <Drake.Kerry@epa.gov>; 'LIMAYE, VIJAY' <Limaye.Vijay@epa.gov>; Sylvia L Ipanag <sipanag@gpagwa.com>; Roger U. Pabunan



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Appendix C attached.

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Please see attached copy of FINAL Guam SO2 Modeling Protocol. I'm sending 2 more emails with attachment i.e. Appendices C and D, respectively. Let us know if you have other questions or need further clarification.

Si' Yu'us Ma'ase.

**Noel P. Cruz**

Engineer II (Environmental)

Planning & Regulatory

Guam Power Authority

[Ncruz1@gpagwa.com](mailto:Ncruz1@gpagwa.com)

Tel: (671) 648-3030

Fax: (671) 648-3167

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**Subject:** Re: Discuss Guam SO2 Modeling Protocol

Gwen,

We are almost halfway through June and we wanted to follow up with USEPA to determine if there were any more comments, questions or concerns on the latest submission (attached) of the Draft Modeling Protocol. Please advise and we look forward to submitting the final Modeling Protocol in a timely manner for the island of Guam.

Sincerely,

Roland T. Gutierrez Jr., MPA  
EHS Supervisor, Air Pollution Control Program - Guam EPA  
[roland.gutierrez@epa.guam.gov](mailto:roland.gutierrez@epa.guam.gov)  
Ph. 1-671-300-4751/2/3  
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On Fri, May 27, 2016 at 9:33 AM, Roger U. Pabunan <[rpabunan@gpagwa.com](mailto:rpabunan@gpagwa.com)> wrote:

Good day Gwen.

Please see attached current version of the DRR Protocol for Guam. This is Revision 3, which includes responses to comments from Carol Bohnenkamp's May 9<sup>th</sup> Email.

Regards,

Roger U. Pabunan

Engineer Supervisor

Planning & Regulatory

Guam Power Authority

[rpabunan@gpagwa.com](mailto:rpabunan@gpagwa.com)

Tel: [\(671\) 648-3032](tel:(671)648-3032)

Fax: [\(671\) 648-3290](tel:(671)648-3290)

I-connect: 671\*11\*20152

**From:** YOSHIMURA, GWEN [<mailto:Yoshimura.Gwen@epa.gov>]

**Sent:** Friday, May 27, 2016 6:58 AM

**To:** Conchita San Nicolas Taitano; Sylvia L Ipanag; Roland Gutierrez - Air Program Supervisor

**Cc:** Bohnenkamp, Carol; Drake, Kerry; LIMAYE, VIJAY

**Subject:** RE: Discuss Guam SO2 Modeling Protocol

Hello,

We are nearing the end of the month, with about a month to go before the SO2 modeling protocol is due on July 1<sup>st</sup>. Carol has not received any questions concerning our May 9<sup>th</sup> modeling protocol comments. As a reminder, should questions arise, please feel free to contact her at the number provided below.

Thanks!

-Gwen

---

**From:** Bohnenkamp, Carol

**Sent:** Tuesday, May 10, 2016 8:11 AM

**To:** Drake, Kerry <[Drake.Kerry@epa.gov](mailto:Drake.Kerry@epa.gov)>; Conchita San Nicolas Taitano <[conchita.taitano@epa.guam.gov](mailto:conchita.taitano@epa.guam.gov)>; YOSHIMURA, GWEN <[Yoshimura.Gwen@epa.gov](mailto:Yoshimura.Gwen@epa.gov)>; Sylvia Ipanag <[sipanag@gpagwa.com](mailto:sipanag@gpagwa.com)>; Roland Gutierrez - Air Program Supervisor <[roland.gutierrez@epa.guam.gov](mailto:roland.gutierrez@epa.guam.gov)>

**Subject:** RE: Discuss Guam SO2 Modeling Protocol

Here are the notes from yesterday's call about the SO2 NAAQS Designation Modeling for Guam. Please feel free to call me at (415) 947-4130 if you have any questions.

- 2.0 Emission and Source Data

- Please provide an emission inventory.
- List which sources will be explicitly modeled when you have completed that analysis.
  
- 5.0 Receptor Array.
  
- Clarify the process for editing out high concentrations.
  
- 6.0 Meteorological data
  
- Please clarify the hierarchy for data use for the surface data.
- Discuss the quality assurance and data completeness for each year.
- Please discuss other available surface data, if any.
  
- 7.0 Background concentration
  
- After determining which nearby sources will be explicitly modeled, please select a background concentration that will account for the point sources that are not modeled, as well as ships, etc.
- See SO2 Modeling TAD, page 30, regarding selecting background concentration
  
- 8.0 Modeling Results
  
- Explain why “ For comparison to the 1 hour SO2 NAAQS, the maximum five year average of the 99<sup>th</sup> percentile of the annual distribution of the maximum daily 1-hour predicted concentration determined for each receptor will be reported using three years of

meteorological data.”

Carol Bohnenkamp

US EPA Region 9 (AIR-7)

75 Hawthorne St.

San Francisco, CA 94105

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**To:** YOSHIMURA, GWEN[Yoshimura.Gwen@epa.gov]; Roland Gutierrez[roland.gutierrez@epa.guam.gov]  
**Cc:** Bohnenkamp, Carol[Bohnenkamp.Carol@epa.gov]; conchita.taitano@epa.guam.gov[conchita.taitano@epa.guam.gov]; Drake, Kerry[Drake.Kerry@epa.gov]; LIMAYE, VIJAY[Limaye.Vijay@epa.gov]; Sylvia L Ipanag[sipanag@gpagwa.com]; Roger U. Pabunan[rpabunan@gpagwa.com]; Norbert M. Madrazo[nmadrazo@gpagwa.com]; Luong Truong[luong.truong@epa.guam.gov]  
**From:** Noel P. Cruz  
**Sent:** Tue 6/14/2016 4:56:08 AM  
**Subject:** Discuss Guam SO2 Modeling Protocol  
(3 of 3) Attachment D - AAQM Network Data 1999-2000.pdf

Gwen/Roland,

Appendix D ...last email attachment.

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Engineer II (Environmental)

Planning & Regulatory

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Ph. 1-671-300-4751/2/3  
Fax: 1-671-300-4531

[epa.guam.gov](http://epa.guam.gov) - [facebook.com/GuamEPA](https://facebook.com/GuamEPA) - [twitter.com/GuamEPA](https://twitter.com/GuamEPA)

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Planning & Regulatory

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US EPA Region 9 (AIR-7)

75 Hawthorne St.

San Francisco, CA 94105

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**From:** Noel P. Cruz  
**Sent:** Tue 6/14/2016 4:45:39 AM  
**Subject:** Discuss Guam SO2 Modeling Protocol  
(2 of 3) Attachment C- QCQA Manual for CPP MET Monitoring Program.pdf

Gwen/Roland,

Appendix C attached.

-noel

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Si' Yu'us Ma'ase.

**Noel P. Cruz**



Engineer II (Environmental)

Planning & Regulatory

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Fax: (671) 648-3167

**From:** YOSHIMURA, GWEN [<mailto:Yoshimura.Gwen@epa.gov>]

**Sent:** Tuesday, June 14, 2016 8:32 AM

**To:** Roland Gutierrez <[roland.gutierrez@epa.guam.gov](mailto:roland.gutierrez@epa.guam.gov)>; Roger U. Pabunan <[rpabunan@gpagwa.com](mailto:rpabunan@gpagwa.com)>

**Cc:** Bohnenkamp, Carol <[Bohnenkamp.Carol@epa.gov](mailto:Bohnenkamp.Carol@epa.gov)>; Conchita Taitano ([conchita.taitano@epa.guam.gov](mailto:conchita.taitano@epa.guam.gov)) <[conchita.taitano@epa.guam.gov](mailto:conchita.taitano@epa.guam.gov)>; Drake, Kerry <[Drake.Kerry@epa.gov](mailto:Drake.Kerry@epa.gov)>; LIMAYE, VIJAY <[Limaye.Vijay@epa.gov](mailto:Limaye.Vijay@epa.gov)>; Sylvia L Ipanag <[sipanag@gpagwa.com](mailto:sipanag@gpagwa.com)>; Noel P. Cruz <[ncruz1@gpagwa.com](mailto:ncruz1@gpagwa.com)>; Norbert M. Madrazo <[nmadrazo@gpagwa.com](mailto:nmadrazo@gpagwa.com)>; Luong Truong <[luong.truong@epa.guam.gov](mailto:luong.truong@epa.guam.gov)>

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Engineer Supervisor

Planning & Regulatory

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I-connect: 671\*11\*20152

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**Sent:** Friday, May 27, 2016 6:58 AM  
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Carol Bohnenkamp

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**From:** Noel P. Cruz  
**Sent:** Tue 6/14/2016 4:40:46 AM  
**Subject:** RE: Discuss Guam SO2 Modeling Protocol  
(1 of 3) SO2 NAAQS Designations Modeling Protocol for GPA.pdf

Hafa Adai Gwen/Roland,

Please see attached copy of FINAL Guam SO2 Modeling Protocol. I'm sending 2 more emails with attachment i.e. Appendices C and D, respectively. Let us know if you have other questions or need further clarification.

Si' Yu'us Ma'ase.

**Noel P. Cruz**

Engineer II (Environmental)

Planning & Regulatory

Guam Power Authority

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[DRAFT PROTOCOL 6-06-16.docx](#)

Gwen,

We are almost halfway through June and we wanted to follow up with USEPA to determine if there were any more comments, questions or concerns on the latest submission (attached) of the Draft Modeling Protocol. Please advise and we look forward to submitting the final Modeling Protocol in a timely manner for the island of Guam.

Sincerely,

Roland T. Gutierrez Jr., MPA  
EHS Supervisor, Air Pollution Control Program - Guam EPA  
[roland.gutierrez@epa.guam.gov](mailto:roland.gutierrez@epa.guam.gov)  
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On Fri, May 27, 2016 at 9:33 AM, Roger U. Pabunan <[rpabunan@gpagwa.com](mailto:rpabunan@gpagwa.com)> wrote:

Good day Gwen.

Please see attached current version of the DRR Protocol for Guam. This is Revision 3, which includes responses to comments from Carol Bohnenkamp's May 9<sup>th</sup> Email.

Regards,

Roger U. Pabunan

Engineer Supervisor

Planning & Regulatory

Guam Power Authority

[rpabunan@gpagwa.com](mailto:rpabunan@gpagwa.com)

Tel: [\(671\) 648-3032](tel:(671)648-3032)

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I-connect: 671\*11\*20152

**From:** YOSHIMURA, GWEN [<mailto:Yoshimura.Gwen@epa.gov>]

**Sent:** Friday, May 27, 2016 6:58 AM

**To:** Conchita San Nicolas Taitano; Sylvia L Ipanag; Roland Gutierrez - Air Program Supervisor

**Cc:** Bohnenkamp, Carol; Drake, Kerry; LIMAYE, VIJAY

**Subject:** RE: Discuss Guam SO2 Modeling Protocol

Hello,

We are nearing the end of the month, with about a month to go before the SO2 modeling protocol is due on July 1<sup>st</sup>. Carol has not received any questions concerning our May 9<sup>th</sup> modeling protocol comments. As a reminder, should questions arise, please feel free to contact her at the number provided below.

Thanks!

-Gwen

---

**From:** Bohnenkamp, Carol

**Sent:** Tuesday, May 10, 2016 8:11 AM

**To:** Drake, Kerry <[Drake.Kerry@epa.gov](mailto:Drake.Kerry@epa.gov)>; Conchita San Nicolas Taitano <[conchita.taitano@epa.guam.gov](mailto:conchita.taitano@epa.guam.gov)>; YOSHIMURA, GWEN <[Yoshimura.Gwen@epa.gov](mailto:Yoshimura.Gwen@epa.gov)>; Sylvia Ipanag <[sipanag@gpagwa.com](mailto:sipanag@gpagwa.com)>; Roland Gutierrez - Air Program Supervisor <[roland.gutierrez@epa.guam.gov](mailto:roland.gutierrez@epa.guam.gov)>

**Subject:** RE: Discuss Guam SO2 Modeling Protocol

Here are the notes from yesterday's call about the SO2 NAAQS Designation Modeling for Guam. Please feel free to call me at (415) 947-4130 if you have any questions.

- 2.0 Emission and Source Data

- Please provide an emission inventory.

- List which sources will be explicitly modeled when you have completed that analysis.

- 5.0 Receptor Array.

- Clarify the process for editing out high concentrations.

- 6.0 Meteorological data

- Please clarify the hierarchy for data use for the surface data.

- Discuss the quality assurance and data completeness for each year.

- Please discuss other available surface data, if any.

- 7.0 Background concentration

- After determining which nearby sources will be explicitly modeled, please select a background concentration that will account for the point sources that are not modeled, as well as ships, etc.

- See SO<sub>2</sub> Modeling TAD, page 30, regarding selecting background concentration

- 8.0 Modeling Results

- Explain why “ For comparison to the 1 hour SO<sub>2</sub> NAAQS, the maximum five year average of the 99<sup>th</sup> percentile of the annual distribution of the maximum daily 1-hour predicted concentration determined for each receptor will be reported using three years of meteorological data.”

Carol Bohnenkamp

US EPA Region 9 (AIR-7)

75 Hawthorne St.

San Francisco, CA 94105

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**To:** YOSHIMURA, GWEN[Yoshimura.Gwen@epa.gov]  
**Cc:** Bohnenkamp, Carol[Bohnenkamp.Carol@epa.gov]; Conchita Taitano (conchita.taitano@epa.guam.gov)[conchita.taitano@epa.guam.gov]; Roland Gutierrez (roland.gutierrez@epa.guam.gov)[roland.gutierrez@epa.guam.gov]; Drake, Kerry[Drake.Kerry@epa.gov]; LIMAYE, VIJAY[Limaye.Vijay@epa.gov]; Sylvia L Ipanag[sipanag@gpagwa.com]; Noel P. Cruz[ncruz1@gpagwa.com]; Norbert M. Madrazo[nmadrazo@gpagwa.com]  
**From:** Roger U. Pabunan  
**Sent:** Thur 5/26/2016 11:33:11 PM  
**Subject:** RE: Discuss Guam SO2 Modeling Protocol  
[DRAFT PROTOCOL 5-20-16 - rev3.docx](#)

Good day Gwen.

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Regards,

Roger U. Pabunan

Engineer Supervisor

Planning & Regulatory

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Carol Bohnenkamp

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**To:** Grooms, Leland[Grooms.Leland@epa.gov]  
**Cc:** Davis, Michael[Davis.Michael@epa.gov]; Brown, Steven[Brown.Steven@epa.gov]; Peter, David[peter.david@epa.gov]; patricia.maliro@dnr.mo.gov[patricia.maliro@dnr.mo.gov]; Algoe-Eakin, Amy[Algoe-Eakin.Amy@epa.gov]; Bybee, Darcy[darcy.bybee@dnr.mo.gov]; Moore, Kyra[kyra.moore@dnr.mo.gov]; Hawkins, Andy[hawkins.andy@epa.gov]; Wilbur, Emily[emily.wilbur@dnr.mo.gov]  
**From:** Hall, Stephen  
**Sent:** Fri 5/27/2016 9:19:09 PM  
**Subject:** MO 2016 Monitoring Network Plan Posted

Lee,

We posted the Missouri 2016 Monitoring Network Plan for public inspection today. It is available at the following link:

<http://dnr.mo.gov/env/apcp/airpollutants.htm#monitoringnetworkplan>

There is one slight change in the Buick SO<sub>2</sub> network based on a discussion we had with Doe Run staff this week. Rather than proposing the sawmill site, they proposed the location of the former SO<sub>2</sub> monitoring site used in their preconstruction PSD project several years ago (circa 2006). This location already has electrical power established and is located less than ¼ mile east of the sawmill site you visited. This former PSD monitoring site location is still in the area of modeled SO<sub>2</sub> impact. Historical preconstruction SO<sub>2</sub> monitoring data obtained at this location is summarized in our 2011 Monitoring Network Plan on pages 18 and 19 and is available at this link: <http://dnr.mo.gov/env/apcp/docs/2011monitoringnetwork.pdf>

Patricia Maliro will follow up with you next week regarding these details.

Stephen M. Hall

Air Quality Analysis Section Chief

Air Pollution Control Program

Missouri Department of Natural Resources

1659A E. Elm St., Jefferson City, MO 65102-0176

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